ABSTRACT OF THE DISCLOSURE

A file system protection mechanism for an operating system image for a portable computing device is provided to assist in ensuring a good user experience. A signed catalog file is embedded in a resource-sparing operating system (OS), such as a Windows CE image, for security enhancement and load verification purposes. The invention performs various checks on the image and the signature of the image to ensure that image has not been maliciously modified and that it complies with a release standard. Such a mechanism is important to protect image loads from external threats made possible by, e.g. recent incorporation of broadband wireless and wireline connectivity for portable computing devices. The signing technique includes creating a signed catalog of the image and embedding that catalog into the image as it is loaded onto the portable computing device.